THE PARK STORE (PWS 1090056)
SOURCE WATER ASSESSMENT REPORT

October 1, 2001

State of Idaho
Department of Environmental Quality

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within a 1,000 foot radius of your drinking water source, sensitivity factors associated with the source and characteristics associated with either your aquifer or watershed in which you live.

This report, *Source Water Assessment for The Park Store (PWS 1090056)* located in Bonner County, Idaho, describes the public drinking water system, the associated potential contaminant sources located within a 1,000' boundary around the drinking water source, and the susceptibility (risk) that may be associated with any associated potential contaminants. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this system. **The results should <u>not be</u> used as an absolute measure of risk and is not intended to undermine the confidence in your water system.**

The Park Store drinking water system consists of one well. At the time of the well's last sanitary survey (1999), it was determined that the well is <u>not</u> in compliance with Idaho Rules for Public Drinking Water Systems IDAPA 16.01.08. This is due to the proximity of sewage disposal system components to the wellhead. Water samples have been negative for the presence of total coliform bacteria since at least 1994.

There is no well driller's report available for the well, which contributed to the well's moderate system construction score. It was possible to determine from the 1999 survey that the well's sanitary and surface seals are intact. The well's exact depth and static water level were not determined due to a general lack of information. The well is located outside of the 100-year floodplain, and was determined to be ground water during GWUDI determination in 1999, although further testing is required.

The well's hydrologic sensitivity was determined to be high. This was based on the well's presumed shallow depth, which precludes the existence of a significant confining layer that might act as a barrier to contamination. Additionally, the soils in the area are moderately to well drained, allowing contaminants to move freely through the soil.

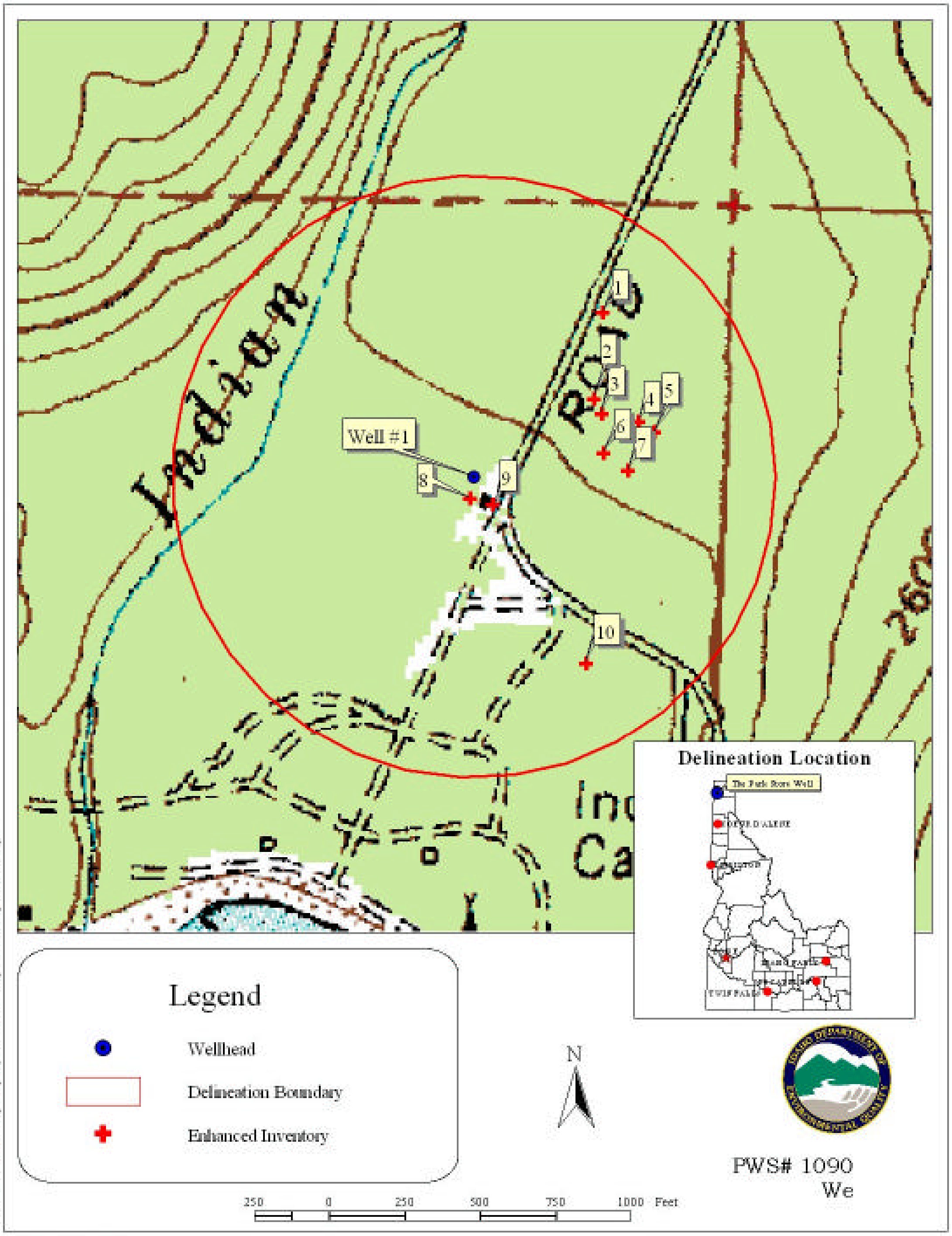
There are a total of 10 potential contaminant sites located within the Park Store's source water assessment area. Eight of the sites are septic-related, while the remaining sites are gas tanks. One of the septic tanks is located less than 50' from the wellhead, which resulted in the well automatically receiving high susceptibility scores in the inorganic chemical and microbial categories. The well was assigned moderate scores in the volatile organic and synthetic organic categories. A copy of the susceptibility analysis for your system along with a map showing any potential contaminant sources is included with this summary. Information regarding the potential contaminants within the 1,000' boundary have been summarized and included in Table 1.

Table 1.

SITE #	Source Description	Source of Information	Potential Contaminants
1	Septic Tanks and RV Dump Station	Enhanced Inventory	IOC, Microbial
2	Septic Tank	Enhanced Inventory	IOC, Microbial
3	Gas Tank	Enhanced Inventory	VOC, SOC
4	Septic Tank	Enhanced Inventory	IOC, Microbial
5	Septic Tank	Enhanced Inventory	IOC, Microbial
6	Septic Tank	Enhanced Inventory	IOC, Microbial
7	Septic Tank	Enhanced Inventory	IOC, Microbial
8	Septic Tank	Enhanced Inventory	IOC, Microbial
9	Gas Tank	Enhanced Inventory	VOC, SOC
10	Septic Tanks	Enhanced Inventory	IOC, Microbial

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Figure 1. The Park Store Delineation Map and Potential Contaminant Source Locations



APR 24 2001, 10:18

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

Managers of The Park Store should focus source water protection activities on bringing the water system into compliance with Idaho Rules for Public Drinking Water Systems. This might included relocating the well or obtaining an alternate source of water. It may also be possible for the water system to relocate the septic tank greater than 100' from the wellhead. Managers of The Park Store should work with Mike Nelson of the Panhandle Health Department regarding this matter. The Park Store should also have a source water protection plan that includes management measures addressing maintenance of all of the septic systems located within the store's source water assessment area. As part of the source water protection plan, water system managers may want to develop a public education program directed at area users, notifying them of the presence of source water and steps that can be taken to protect it. Lastly, the source water protection plan should include a contingency plan that outlines what steps would be taken should the well become contaminated. Source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

For assistance in developing source water protection strategies please Alan Miller at the Coeur d'Alene regional IDEQ office at (208) 769-1422.

DEQ website:

http://www..deq.state.id.us

Attachment A

The Park Store
Susceptibility Analysis
Worksheets

Ground Water Final Susceptibility Scoring

0-5 = Low Susceptibility

6-12 = Moderate Susceptibility

13-18 = High Susceptibility

Ground Water Susceptibility Report Public Water System Name : THE PARK STORE Well# : WELL #1

Public Water System Number 1090056 2/28/01 10:38:51 AM

1. System Construction		SCORE			
Drill Date	1985?				
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	YES	1999			
Well meets IDWR construction standards	N/A	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	N/A	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		4			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	RANGELAND, WOODLAND, BASALT	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	YES	NO	NO	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		High*	0	0	High*
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	8	2	2	8
(Score = # Sources X 2) 8 Points Maximum		8	4	4	8
Sources of Class II or III leachable contaminants or	YES	8	2	2	
4 Points Maximum		4	2	2	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		12	6	6	8
Cumulative Potential Contaminant / Land Use Score		12	6	6	8
4. Final Susceptibility Source Score		13	12	12	13
5. Final Well Ranking		High	Moderate	Moderate	High

*Source automatically rated as highly susceptible in this category due to the presence of a contaminant source within Zone 1A (sanitary setback)

POTENTIAL CONTAMINANT INVENTORY
LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as ASuperfund@ is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.